Approved
12/9/2010

Rhode Island Statewide Planning Program
**STATE PLANNING COUNCIL**

**Thursday, December 9, 2010**
William E. Powers Building
Conference Room A
One Capitol Hill, Providence, RI

## I. ATTENDANCE

| | |
|---|---|
| Mr. Kevin Flynn, Chair | Representing Ms. Rosemary Booth-Gallogly, RI DOA |
| Mr. Jared L. Rhodes, II Secretary | Statewide Planning Program |
| Ms. Jeanne Boyle | City of East Providence, Planning & Development |
| Ms. Jeanne Cola | RI Housing Resources Commission |
| Ms. Sharon Conard-Wells | West Elmwood Housing Development Corporation |
| Mr. Thomas Deller | City of Providence Department of Planning & Development |
| Mr. Christopher Long | Representing Mr. Timothy Costa, Vice Chair, Governor's Policy Office |
| Mr. Thomas Mullaney | RI DOA Budget Office |
| Mr. L. Vincent Murray | Town of South Kingstown Planning Department |
| Ms. Anna Prager | Public Member |
| Mr. Peder Schaefer | Representing Mr. Daniel Beardsley, RI League of Cities and Towns |
| Mr. William Sequino | Public Member |
| Mr. Bob Shawver | Representing Mr. Michael Lewis, RI DOT |
| Mr. Henry Sherlock | Representing Mr. Stephen Cardi, Cardi Corporation |
| Ms. Janet White-Raymond | Public Member |

## Members Absent

| | |
|---|---|
| Mr. Peter Osborn | Federal Highway Administration |
| Mr. John Trevor | Environmental Advocate |

## Guests

| | |
|---|---|
| Ms. Ann Clarke | Rhode Island Airport Corporation |

## Staff – Division of Planning

| | |
|---|---|
| Ms. Nancy Hess | Supervising Planner, Land Use |
| Mr. Kevin Nelson | Supervising Planner, Comprehensive Plans |
| Ms. Derry Riding | Principal Planner |
| Ms. Dawn Vittorioso | Executive Assistant |

## II. AGENDA ITEMS

### 1. Call to Order

Mr. Flynn called the meeting to order at 9:06 a.m.

### 2. Approval of the September 16, 2010 Meeting Minutes

*Ms. Raymond moved to approve the Minutes of September 16, 2010 as presented. The motion was seconded by Mr. Sequino. There was no further discussion and the motion carried unanimously.*

### 3. State Guide Plan Element 640: Rhode Island Airport Systems Plan

Mr. Flynn began by explaining that at the request of the staff at the Rhode Island Airport Corporation (RIAC), this agenda item has been deferred. Mr. Flynn acknowledged Ms. Clarke from RIAC and asked if she would like to make any further comments. Ms. Clarke apologized for not being prepared to provide a presentation. Ms. Clarke explained that there are some outstanding issues that will need to be addressed before presenting the product any further. At this time, Ms. Prager asked what the outstanding issues were. In response, Ms. Clarke said that the language regarding consistency with the State Guide Plan; the question at hand is whether additional language should be added.

Mr. Flynn added that the planned presentation was for informational purposes. Mr. Flynn then said that the presentation was given to the Technical Committee last week by RIAC.

Mr. Schaefer asked if the plan included the T.F. Green runway extension. Mr. Flynn said that the Plan defers to the ongoing Environmental Impact Statement (EIS) process as the more appropriate vehicle for selecting the preferred alternative for runway extension at T.F. Green. Ms. Clarke said that a draft of the EIS was published in July and that the Federal Aviation Administration has identified the 8,700 foot southern extension as the preferred alternative. Ms. Clarke then explained that under this alternative Airport Road would remain substantially as is but Main Avenue would be reconfigured with a minor southerly curve.

Ms. Prager asked if the City of Warwick and RIAC reached an agreement on the runway extension. Ms. Clarke indicated that she wouldn't categorize it that way but did note that the City of Warwick is taking advantage of the EIS process and has submitted comments. She then said that RIAC worked closely with the City of Warwick to try to develop a Plan, however at this point the FAA will make the final determination and their record of decision is scheduled to be delivered in 2011. Ms. Prager then asked if RIAC was still in the negotiating process with the City of Warwick. Ms. Clarke said that RIAC continues to collaborate with the City of Warwick.

Mr. Sequino asked for clarification of the issue at hand. Mr. Flynn first explained that State law authorizes the Economic Development Corporation (EDC) and its subsidiaries, including RIAC, to make their own determinations as to whether their actions are consistent with the State Guide Plan (SGP). He then noted that the issue of contention is over the language that would ask or potentially require RIAC to seek advisory comment from the Division of Planning as to the consistency of RIAC's actions with the SGP or from applicable host communities regarding consistency with the local Comprehensive Plan.

By way of background, Mr. Flynn then explained that RIAC had initially agreed to the "should seek comment" approach but then asked for the entire section to be withdrawn once the City of Warwick had requested that the language be modified to "shall seek comment." Ms. Clarke then added that although RIAC is willing to communicate with the municipalities and with Statewide Planning on issues of mutual importance they would not commit to doing so through inclusion of such language in the plan.

At this point, Mr. Sequino asked Mr. Flynn if RIAC would be bound by the requested advisory comments. In response, Mr. Flynn indicated that they would be advisory only and not be binding upon RIAC. Mr. Murray commented that he thought it would be a sign of good faith for RIAC to commit to seeking advisory comment especially if it is not binding. Additionally, he said that this could improve the relationships between RIAC, the City of Warwick, and Warwick residents.

Ms. Boyle then asked if the language "shall" were to be included in the Plan, to what extent would RIAC be bound to seeking an Advisory opinion. Mr. Flynn indicated that Ms. Boyle's question was the crux of the issue that staff was waiting for feedback on from the Department's Legal Office.

In closing the discussion , Ms. Prager indicated her disappointment with the fact that RIAC chose not to deliver the presentation as scheduled. As there were no other comments or questions, Mr. Flynn thanked Ms. Clarke for attending the meeting.

## 4. Consolidation of Potable Water Supply State Guide Plan Elements

Ms. Hess began by reminding the Council that the water presentation was a continuation from the September meeting. She stressed that the document is a draft and that the Advisory Committee's ongoing work on subsequent parts would be presented to the Council at a later date. Today's discussion would focus on Part 2: Potable Water Issues Today. This plan's goals, policies and strategies will be addressed and presented in the future during the next part of the Plan.

Ms. Hess stated that the hardest part of writing this Chapter was capturing specific data about water availability. Ms. Hess said that she will be working with Ms. Crawley from the Water Resources Board to obtain up-to-date data. She then provided an overview of the following items:

What Have We Got?:

- RI's public water suppliers serve 88% of the state's population and 12% depend on private supplies. The 28 major water suppliers and the public systems of Richmond and Block Island provide 98% of this water (116 MGD) and the remaining 450 small public systems provide about 2% of this water which is about 3.0 MGD.
- The population has not grown at the rate predicted in the last SGP on water supply and the economy has changed. RI's population has shown marginal growth but more importantly has been redistributed within southern and western suburban and rural communities in ways that have changed the demand for water.
- The groundwater overall "safe or dependable" yield set by the Arthur D. Little Study was estimated to equal about 150 to 160 MGD. The wellfield yield in RI is estimated to be 36.6 to 27.6 MGD.
- The surface water estimated safe yield for RI's developed surface reservoirs is 129.1 MGD. In 1990, the Study projected the entire safe yield of the State to be within 165.7 MGD.

What are We Doing With It?

- According to the Water Resources Board, the statewide average daily use is equal to about half of the maximum statewide daily capacity of the public suppliers but just a statewide view may mask problems. It is a different picture regionally:
    - Northern RI has generally adequate supplies.
    - In South County, water is not always available when and where needed.
    - East Bay has generally adequate supplies.
    - In the Central Region, both housing and economic growth are stressing available supplies.

Changing Use Patterns:

- Prior to the 1990's industrial water use accounted for half of the total water used in the State. Industrial water use is down 30% since 1990 while overall water use is up 12%. Residential and commercial now account for 75% of all water use. Climbing summer peak water use is now the biggest water use issue.
- Household use averages 58-72 gallons per person per day in winter. In summer, watering lawns and gardens increases this use an additional 30-50 gallons daily per person.

Dependence on the Scituate:

- The Providence Water Supply Board (PWSB) provides approximately 60% of the State population with potable water. PWSB is required by RI State Law to provide 150 gallons of water per person per day to 10 communities and one water supplier. Only 3 communities statutorily entitled do not receive water from the reservoir at this time: Burrillville, Foster and Glocester.
- The 2007 Report of the senate Committee on water supply noted the physical limitations and safe yield of the reservoir complex are less than the legislatively decreed requirement of 150 gallons per capita per day to all towns and jurisdictions.

Land Use & Sprawl Impacts:

- Land use has changed in the State with severe implications for water suppliers. New rural development has been occurring without regard for the availability of potable water and public services.
- The State Land Use plan, Land Use 2025, (State Guide Plan 121) has documented that land consumption per person is rapidly occurring in suburban and rural communities since 1997 outpacing population growth.
- Development that bears no direct relationship to existing or proposed infrastructure creates problems for the provision of potable water, hinders the protection of potable supplies from degradation, and fails to consider that adequate supplies for future growth are needed.
- The key to the protection of potable water supplies is to carefully manage land use in accordance with water availability, encourage land uses with low potential for water quality impacts, encourage all uses to use water efficiently, and discourage the use of potable water supplies for uses that don't require potable water.

What's New to Think About – Ms Hess stated that this section will discuss topics that have emerged since the adoption of the last plan in 1997.

Our Aging Infrastructure & Sustainability:

- RI has two major infrastructure issues for water supply. One is that it has some of the oldest water supply infrastructure in the country within our urban core areas. The other is that many of the water systems outside the urban core were built during the last 60 years to accommodate the spread of suburbanization. None of the more recent systems were constructed with concerns for sustainability. Many of the oldest parts of our systems are at the end of their useful life and need to be replaced. Meanwhile, changes in federal standards require upgrades in plants, technology and new practices that require various forms of investment.
- A sustainable water infrastructure integrates these traditional components with the protection and restoration of natural systems, use efficiency, reuse, and the active incorporation of green infrastructure and low impact development to ensure the reliability and resilience of our water resources.
- Water utilities and their regulators should take the primary responsibility for setting the full cost price for water service that not only includes a sufficient level of expenditure to replace pipes and other capital assets for reliable service, but also for improvements that avoid adverse hydrological or environmental impacts on the environment.

- The general public needs constant ongoing education in order to understand how better-maintained, higher-quality infrastructure helps the environment and that repairing and maintaining existing infrastructure keeps communities healthy and competitive.
- We need to invest in existing infrastructure before building new infrastructure.
- We need to look at funding projects that reinforce the smart growth and sustainability components of Land Use 2025. And finally, to support and advise suppliers and communities on actively encouraging efficient water use and ensuring uses match the appropriate water quality needs.

The Challenge of Affordability:

- There are two aspects of affordability. One is that basic essential uses should be provided at a cost that does not exceed all customers' ability to pay. The other is that rates should reflect the total cost of providing water and support the ongoing sustainable management of the water system.
- System managers as well as regulators and governing boards should ensure the price of water services fairly charges ratepayers the total cost of meeting service and sustainable water infrastructure requirements. Water revenues should not be diverted to unrelated purposes.
- RI has some of the lowest prices for water in the country. Ms. Hess gave examples of the annual fees typically collected by the Providence Water Supply Board. In 2009, the typical annual fee was $315. Block Island has the highest rate in the State at $1,300 annually and Pascoag has the lowest at $154 annually based on a 2007 survey.

Small Systems:

- EPA Classifies water systems by size. Of the 487 community water suppliers in RI, 459 are small systems.
- About half of all small systems are in rural communities and about half are in suburban communities built to serve either small clusters of homes or small businesses.
- Access to capital is an issue for many of these small systems.

Economic Development / Agriculture:

- It is impossible to separate sustainable water resources and economic development. Water availability should dictate what can and should happen in a particular location.
- Unlike energy, one cannot generate more water. We get what we get from precipitation. Streams and rivers have a finite amount in their boundaries and a finite capacity to assimilate pollution.
- As RI continues to grow, very difficult decisions will have to be made about when, where, and when not to develop, in order to protect this most important natural resource and maintain the availability of potable water. State agencies and municipalities need to consider water resource availability when reviewing major land development proposals and planning for future growth.
- Municipalities need technical assistance to better understand how to consider water resource availability when developing their comprehensive plans particular to the amount and type of water resources available.
- The number of RI farms is on the increase; therefore agricultural needs for water are expected to increase.

- The DEM Division of Agriculture has the authority to plan for the responsible use of water by the Rhode Island agricultural community. Ms. Hess mentioned that DEM's Division of Agriculture would review this portion of the Plan and provide feedback on the wording.

Stream Flow / Water Allocation:

- Water is not always located where it is needed or available in sufficient quantities for all uses at all times. Stream flow is the flow of water in streams, rivers, and other channels, and is a major element of the water cycle.
- The amount that can be directly drawn or intercepted for human use while supporting the environment can also vary, particularly for groundwater withdrawals and direct stream withdrawals.
- As Land Use 2025 identified, sprawling development patterns have increased populations in the southern and central regions of the State that rely upon groundwater. This has led to expansions of the Scituate Reservoir distribution system and customer base, which in turn has resulted in the creation of excess capacity in other urban reservoir systems (Pawtucket).
- Stream flow is naturally low in our dry summer months when rainfall is at its lowest. During these same months, our demand for water is highest (peak demand), particularly in suburban areas where residential outdoor water use can double or triple wintertime water use. In certain regions of the State, some rivers are showing signs of summertime low flow stress that is linked to groundwater withdrawals, as is the case in the Hunt River in North Kingstown.
- DEM's Office of Water Resources is responsible for balancing stream flow needs to support human uses while maintaining the ecological health of our flowing waters.
- Currently DEM is working on a draft methodology that represents a significant step forward in how RI will manage its water resources.
- The proposed stream flow depletion methodology will establish the volume of water that can be extracted from a stream while still leaving sufficient flow to maintain habitat conditions essential to a healthy aquatic ecosystem.
- DEM still needs to complete and adopt a final methodology with standards that balance the needs of humans to use water for drinking, washing, fire protection, irrigation, manufacturing, and recreating with the needs of fish and wildlife that also depend on the availability of water to sustain healthy, natural communities.
- The waters of RI are owned by the public with the State acting as a trustee. Under RI General Law, the WRB has the authority for the allocation of water resources among water users.
- The WRB has continued the partnership with USGS and the University of Rhode Island to complete water use data, track the movement of water and assess the amount of water available to augment the Arthur D. Little Study.
- Municipalities do not have sufficient capacity to understand how to use USGA information in their planning efforts at this time to efficiently protect their long-term water resource interests. This is a key area which still needs to be addressed.
- Currently the WRB is working on Phase I of a water allocation program.

Efficient Water Use

- Water use efficiency (previously called water conservation) includes anything that prevents and reduces unnecessary, wasteful, uneconomical, or impractical use of potable drinking water

resources. Rhode Island has had a state policy on water use efficiency and conservation of the resource since the adoption of the first water State Guide Plan in 1969.
- Demand management programs include changes in plumbing hardware, pricing and/or usage habits to affect the amount of water used.
- Individuals need to become more aware of how much water they use, how it affects values and resources they care about, and what actions they can take to reduce their water use.
- Targeted efforts are needed by suppliers, municipalities and all users to reduce water demand and to use water efficiently to preserve water supplies for the future. This was the focus of the 2009 Water Use and Efficiency Act. The efforts on this Plan are part of the Division's responsibilities set out in that Act.

Water Reuse

- The burden of supplying water for potable purposes can be eased by reuse of water from previous uses. In other parts of the Country, natural water is scarcer, the use of gray water (treated wastewater) and rainwater harvesting are methods water utilities, municipalities, agriculture and businesses are using to meet the demand for water.
- During a 1-inch rainfall, approximately 620 gallons of water can be collected for every 1,000 square foot of surface area. That means an average house roof will collect over 1,000 gallons for every inch of rainfall.
- 16 States in the US currently have adopted gray water policy. In RI, gray water is regulated under DEM Regulation's for On-Site Wastewater Treatment Systems.
- Improving RI's gray water regulations could save water, improve water treatment, and enable building professionals to add an important extension to their work.
- A case study of the water use issues faced during the construction of Gillette Stadium in Foxborough, MA was reviewed.

Desalination

- The process of desalination involves the removal of dissolved solids (such as salts) from seawater, treated wastewater, or brackish water in order to produce fresh water.
- It takes approximately 2 gallons of seawater to make 1 gallon of fresh water.
- In 2008, the WRB studied 3 possible reverse osmosis desalination locations for the State. The analysis showed that the current price for natural source water is still well below what the costs of desalinated water would be. 300 gallons from Providence Water would be about $1 but the same 300 gallons from desalination would be about $1,600.

Climate Change

- A new issue that water resource planners must consider is climate change.
- Concerns over the future of water have arisen because climate changes may alter the blueprint of the hydrogeological cycle. How climate change will exactly impact our potable water supplies in RI still needs to be further studied.
- Water resource planning today needs to consider a broader range of stresses and adaptation to climate change that will be one factor among many to minimize vulnerability.

Ms. Hess concluded her presentation and welcomed questions and comments. Ms. Boyle made a suggestion to include Rhode a comparison of RI's water rates to other New England areas. Ms. Hess agreed that the information would be useful to include in the Plan.

Mr. Murray asked whether RI EDC includes the low cost of potable water in its marketing materials. Ms. Hess was unsure as to whether they did.

Mr. Deller asked if the Plan would include a section on how the state goes about protecting its surface reservoir watersheds. Ms. Hess indicated that this information is in Part 1 and will also be included in the next section of the Plan.

Mr. Schaefer asked if the Plan would include the quality of the water; such as the taste. He then referred to an article in the newspaper six months ago that talked about the quality of taste in RI's drinking water. Ms. Hess said that she did not include this type of information. Mr. Flynn agreed with Mr. Schaefer and then suggested that the content be included in the Economic Development section.

Ms. Boyle took a moment to express her support and then praised the work that has been done thus far by Ms. Hess. Ms. Boyle then said that when the Plan is complete, it should be available to the general public. She then said that the general public should be aware of the comparable rates and the quality of water that RI offers to its residents. Mr. Flynn acknowledged Ms. Boyle's suggestion and said that maybe this information could be included in an executive summary; similar to that which was completed for Land Use 2025. Ms. Prager then added that it will not only be important for the general public to understand RI's comparable rates and water quality, but they will also need to be educated on the importance of water conservation. She then said that the general public should be more conscious about their residential water use and the shortage effects. Mr. Murray agreed that educating the general public is important. He then gave the example of residential lawn sprinklers in use during rainstorms. Ms. Wells suggested partnering up with local school departments. Ms. Wells said that if the children are educated on water use, they are likely to bring home that knowledge to their families.

Next, Ms. Prager asked if the industrial water usage was ever the largest user. In response, Ms. Hess said that industrial usage was the largest user during the 1960's and 1970's; however, industrial usage has declined especially in manufacturing. Ms. Prager next asked if conservation contributed to the decline in industrial usage. Ms. Hess said yes somewhat and use of more advanced technology has helped too. Mr. Flynn also added that we can't quantify the industrial decline; however, we can speculate that the loss of employment may play a factor in the decline.

Mr. Sherlock commented that Providence owns the Water System, however, the rates are controlled by the State (Public Utilities Commission). Mr. Sherlock then said that the real issue at hand is the growing communities that are dependant on wells. He then said that Providence is near capacity and most likely cannot continue to assist growing communities. Mr. Flynn said that the Water Resources Board is actively developing a wellfield that will supply several million gallons a day at Big River.

As there were no further questions or comments, Mr. Flynn thanked everyone for their comments and then thanked Ms. Hess for doing an excellent job.

## 5. Transportation Advisory Committee Vice Chairmanship

Mr. Rhodes began explaining that the Transportation Advisory Committee (TAC) is currently without a Vice Chairperson due to the recent passing of long time member Dr. Robert Quigley. In recognition of the need to fill this important office and the authority of the State Planning Council to make the appointment as specified in Rule 9.02.02, the TAC has since voted to nominate Committee member Robert Murray to this position and to forward this nomination to the Council for its consideration. Mr. Rhodes then said that if there is a consensus among Council members, the item will be placed on the January agenda for Action. The decision to place the item on the January agenda was unanimous.

## 6. Proposed 2011 Meeting Schedule

Mr. Rhodes presented the proposed 2011 meeting schedule for informational purposes and asked the Council to review it prior to next meeting as it will be on the agenda for action. Mr. Flynn added that all the meetings are on the second Thursday of the month with the exceptions of August, September and October which have been moved to accommodate holidays.

## 7. Staff Report

Mr. Rhodes reported that after nearly two years of effort DOP had finally secured permission to officially fill two high level vacancies within the organization. These included the Assistant Chief position previously held by George Johnson and the Transportation Supervising Planner position previously held by Katherine Trapani. Mr. Rhodes then happily announced that Karen Scott received a well deserved promotion to the position Assistant Chief and that Ms. Linsey Cameron, formerly a Principal Planner in the Town of North Kingstown, had been hired to the position of Supervising Transportation Planner. Mr. Rhodes concluded his report by mentioning that there are three remaining vacancies that he and the Associate Director will focus their attention on in the coming months. These include the Supervising Planner position previously held by Bruce Vild and two Principal Planner positions previously held by Joyce Karger and Kevin Nelson.

Lastly, Mr. Flynn took a moment to inform the Council that he has accepted the resignation of Mr. Rauh due to employment obligations. Mr. Flynn said that the new appointment will take place after the Governor's inauguration. Additionally, Mr. Flynn announced that this will be Mr. Long's last meeting. Mr. Flynn thanked Mr. Long for his contributions and wished him well.

## 8. Other Business

There was no other business.

## 9. Adjourn

*There being no further discussion, Mr. Deller motioned to adjourn. Mr. Long seconded the motion. The motion carried unanimously and the meeting adjourned at 10:10 a.m.*

Respectfully Submitted,

Jared L. Rhodes, II
Secretary